

## Revision Topic - Timber Production

### **Need for Change**

The 1987 Forest Plans established allowable sale quantities (ASQ) as the maximum level of timber that could be harvested. Timber production levels have been well below the ASQ on both the KNF and IPNFs. While timber harvest levels have not exceeded the maximums established in the ASQ, they have also not met expectations for management and output levels. Even though ASQ is the maximum harvest level, there was an expectation by the public that this level was achievable and predicted. The analysis conducted for the Forest Plan used this level of harvest in estimating affects from timber management on other resources and the impact to local jobs and income. With the reduced timber harvest level, there is a need to reanalyze timber harvest levels and estimate the effects on other resources and the local communities.

The management direction in the 1987 Forest Plans emphasized the production of timber, with the majority of management areas allowing or promoting timber management. In the 1990s, the Forest Service began to shift its focus and mission towards ecosystem management and ecological sustainability. This change in policy and direction resulted in a decreased emphasis on commercial timber production and an increased emphasis on timber production as a tool for restoration or as a means to address other resource requirements or needs. However, budget allocation and targets remain largely tied to commercial timber production. There is a need to reanalyze timber harvest levels and revise direction to address this change in management.

In addition, evaluation of timber suitability is required to be reviewed every 10-15 years (36 CFR 219.14). Since the adoption of the 1987 Forest Plans, many changes to timber suitability have occurred, including changed Forest Service handbook direction (FSH 2409.13).

### **Laws and Regulations**

The National Forest Management Act (NFMA) of 1976 (16 U.S.C. 472a) sets forth the requirements for Land and Resource Management Plans (LRMP) for the NFS. The 1982 Planning Regulations associated with NFMA (36 CFR 219) require the identification of areas suitable and available for timber harvest (36 CFR 219.14) and the Allowable Sale Quantity (ASQ) from those lands (36 CFR 219.16).

### **Forest Service Strategic Plan**

The goals and objectives of the USDA Forest Service Strategic Plan (Revision 2000, USDA 20)0a) guide future agency actions.

Goal 2 “Multiple Benefits to People” states: Provide a variety of uses, values, products and services for present and future generations by managing within the capability of sustainable ecosystems.”

Objective 2.c states: “Improve the capability of the Nation’s forest and grasslands to provide desired sustainable levels of uses, values, products, and services.” The measure of this objective is the trends in the quantity or value of selected goods and services provided from the Nation’s forests and grasslands.

### **The Forest Plans and Monitoring and Evaluation**

The Monitoring and Evaluation (M&E) of the Forest Plans has found that levels of timber volume sold have declined substantially over the past 14 years of implementation. The timber sale levels have been well below those projected in both Plans.

The *IPNFs Forest Plan* projected a total maximum timber sell volume of 2,800 million board feet (mmbf), or 280 mmbf annually in the first decade. The monitoring plan indicates the threshold of concern for this item is reached when accomplishments fall below 75% of the desired volume and acres. Timber sell volumes have decreased from 246.4 mmbf in 1988 to 40.7 mmbf in 2001. The cumulative 14-year average for timber sold volume was 56% of Forest Plan projected output levels. This is well below the 75% change threshold, indicating a need to address this item during Forest Plan Revision.

The *KNF Forest Plan* projected a total maximum timber sell volume for the decade from suitable management areas at 2,270 mmbf, which is an average of 227 mmbf per year. In addition, timber sell volume from unsuitable management areas was estimated at 60 mmbf, averaging 6 mmbf per year. M&E Reports indicate that sell volumes have declined from 200 mmbf per year to about 50 mmbf per year between fiscal years 1988 and 2001. The average annual amount sold has been 102 mmbf from suitable lands and 1.7 mmbf from unsuitable lands. The 10-year, 1997 M&E Report for the KNF states “timber sale volumes and acres of timber sold for harvest have declined substantially. Revision of the Forest Plan will provide the opportunity to assess appropriate levels of harvest volume and acreage including review of the land base designated as suitable for timber management. It is also very likely that new yield tables will need to be established as silvicultural prescriptions and management activities are adapted to meet emerging direction”.

### **Planning Questions for Timber Production**

Planning questions have been developed to provide context to the timber production revision topic. These questions are followed by a description of the historic and current condition and form the baseline to compare the effects of the alternatives. Additional analysis will be completed for the DEIS to more fully address these questions. This information will provide the decision maker with the knowledge necessary to understand the issue and make a decision.

**What areas are suitable for providing for wood fiber production? What is the historic and current demand for timber production from the KNF and IPNFs? What are the historic and current timber supply levels and what are the trends?**

### **Historic and Current Condition of Wood Fiber Production**

#### **Timber Suitability**

The 1987 Forest Plans determined that 1,584,000 acres on the IPNFs and 1,263,000 acres on the KNF were suitable for timber management. Suitable timberlands are the land base for determining ASQ and vegetation management for timber production. Timber suitability was determined through the use of resource data and computer models. Handbook (FSH 2409.13) and planning regulations (36 CFR 219.14) define the process for identifying suitable timberlands. Table 1-5 summarizes the classification of lands for timber suitability under the 1987 Forest Plans.

**Table 1-5. Current Timber Suitability Classification**

<b>Suitability Category</b>	<b>IPNFs (Acres)</b>	<b>KNF (Acres)</b>
Total NFS lands	2,478,477	2,245,000
Not Capable or Non-forested	-161,690	-373,000
Potential for Irreversible Soil and Watershed Damage	0	-49,000
No Assurance of Adequate Restocking	-267,263	0
Withdrawn from Timber Production	-50,972	-35,000
Tentatively Suitable for Timber Production	1,998,552	1,788,000
Lands not cost efficient or where multiple-use objectives preclude timber production	-414,389	-525,000
Suitable for Timber Production	1,584,163	1,263,000

The final determination of lands suitable for timber production is based on management area direction. This management area direction may be revised, causing a change in timber suitability designation. In addition, resource data and technology for analyzing timber suitability has improved since analysis was completed for the 1987 Forest Plans. Timber suitability will be re-analyzed as part of the Forest Plan Revision process, using current resource data and Geographical Inventory System (GIS) to identify the criteria shown in table 1-5. This analysis will be included in the DEIS.

#### Timber Demand

The demand for timber production was analyzed for the 1987 Forest Plans. On the IPNFs, a range for timber demand was estimated to be 190 - 253 mmbf/year in 1990. On the KNF, a range for timber demand was estimated at 178 – 224 for decade 1 (1987 – 1996) and 192 – 224 for decade 2 (1997 – 2006).

Many conditions affecting timber demand have changed since the 1987 Forest Plans were developed. Timber harvest from private, state, and NFS lands has declined; imports of wood products have increased; and technology for manufacture of wood products and mill capacity has changed. In addition, with an increased concern on managing for forest health, there is the potential to increase the supply of small-diameter stumpage from NFS lands. Because of these changed conditions and the need to understand market conditions for small-diameter wood products, the demand for wood fiber production will be determined as part of the analysis for the DEIS.

To determine demand, a two-step process will be used:

1. The Timber Assessment Market Model (TAMM) will be used to determine price and demand at a regional level. TAMM is a spatial model of the solid wood and timber inventory elements of the U.S. forest products sector and of softwood lumber and oriented strand board (OSB) production in Canada. It provides annual projections of volumes and prices in the solid wood products and sawtimber stumpage markets and was used in the Fifth Resources Planning Act (RPA) Timber Assessment.
2. Complete an assessment of (1) current industry capacity and capability and (2) potential future capacity and capability of industry. Capacity is the maximum amount of timber that can be utilized and processed. Capability is an analysis of the ability to profitably process materials of various sizes. Assessment of future capacity and capability would explore the potential for expansion and changes in state-of-the-art technology to enable processing of small-diameter wood products (i.e., 7-10" diameter).

Analysis of current and future demand will enable each forest to forecast the feasibility of the sale of wood products, including small diameter products, at various supply levels. This analysis will also be used to better understand the effects of the national forests' timber supply on timber industry and local communities.

### *Timber Supply*

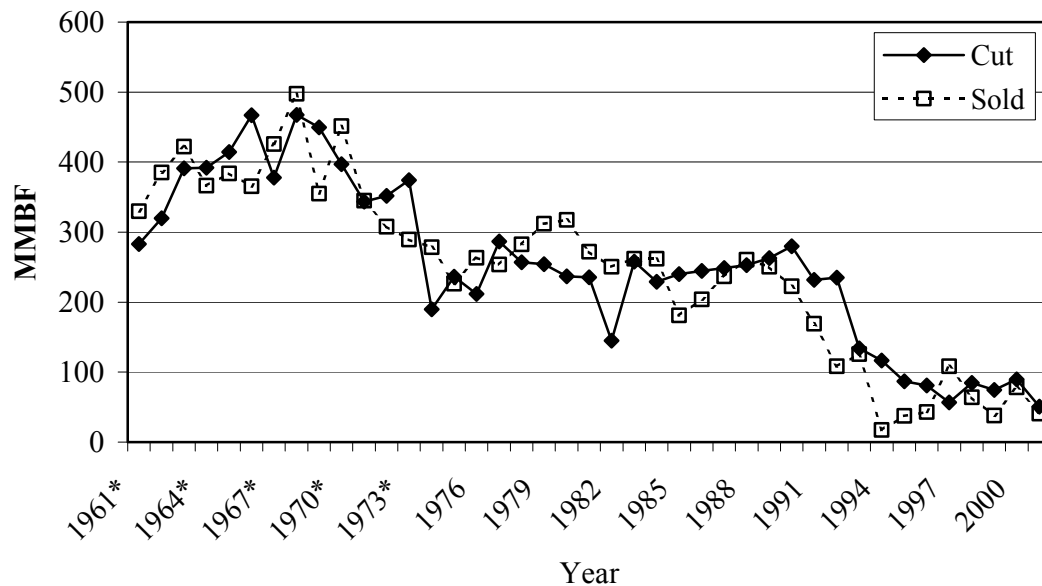
Before the KNF and IPNFs existed, timber was harvested here to meet the needs of the people living in the area. Figures 1-23 and 1-24 display the total volume of timber cut and sold on the KNF and IPNFs from 1961 to 2001. Like many other national forests, timber harvest on the two forests greatly increased in the 1960s to meet the demands of a rapidly growing economy.

The 1987 IPNFs Forest Plan set the ASQ at 2,800 mmbf for the first decade, or 280 mmbf annually. This is based on a suitable timberland base of 1,584,163 acres. The ASQ is predicted to increase to 350 mmbf for the second decade.

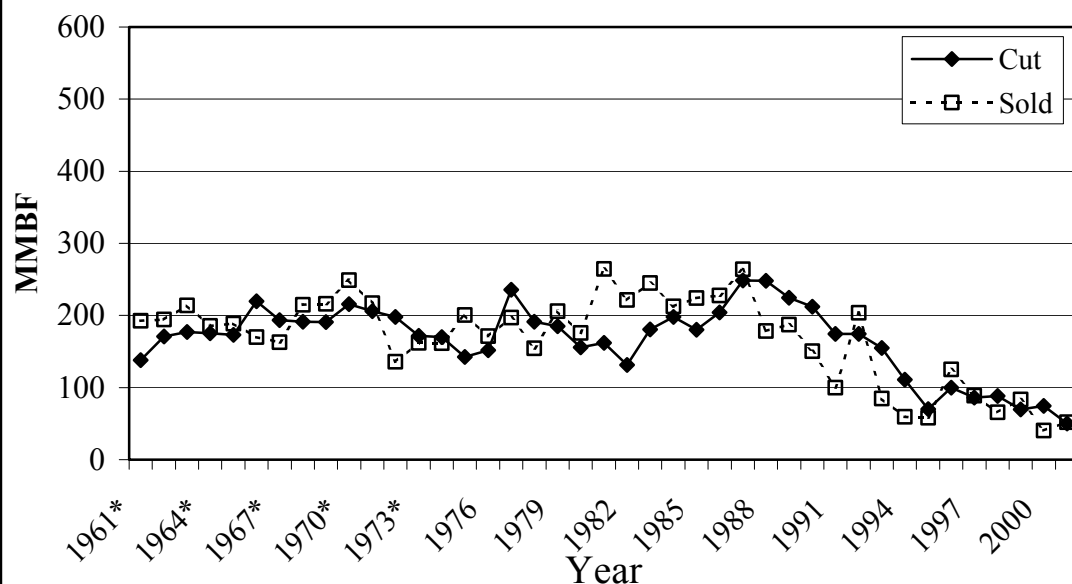
The 1987 KNF Forest Plan set the ASQ at 2,270 mmbf for the first decade, or 227 mmbf annually. This is based on a suitable timberland base of 1,263,000 acres. In November, 1995, the Chief of the Forest Service issued a decision on a Forest Plan appeal related to a technical error in the calculation of the Kootenai's ASQ. The issue centered on how timber age classes were cataloged in the inventory information used to calculate ASQ. A description of the problem is in the Kootenai's FY92 Monitoring Report. The decision required that the Forest is not to exceed a sell volume of 150 mmbf per year until the Forest Plan is either amended or revised.

During the 14 years of implementing the Forest Plan, actual timber harvest levels were 2,038 mmbf on the IPNFs and 1,838 mmbf on the KNF. Timber sell volumes on the IPNFs decreased from 261 mmbf in 1988 to 40.7 mmbf in 2001. On the KNF, timber sell volume has decreased over the life of the plan, from a high of 204 mmbf in 1992 to a low of 41 mmbf in 2000.

The timber production levels have been well below those projected in the 1987 Forest Plans. Many factors have influenced the timber program. On the KNF, the USFWS amended the biological opinions for grizzly bear recovery in July 1995 and changed how recovery processes would take place on the KNF. The INFS Decision of July 1995 resulted in additional streamside protection measures on both the KNF and IPNFs. In general, it has become more difficult to plan and execute sales due to public controversy, protection of threatened and endangered species habitat, inability to enter inventoried roadless areas, water quality concerns, and reduction in forest budgets (see the KNF and IPNFs fiscal year 2001 M&E Reports, USDA 2002b and 2002c).

**Figure 1-23. Volume Cut and Sold on the IPNFs (in MMBF)**

Source: Region 1 Timber Sale Program Statistics, 12/17/2001

**Figure 1-24. Volume Cut and Sold on the KNF (in MMBF)**

Source: Region 1 Timber Sale Program Statistics, 12/17/2001

Timber production will be analyzed in the Forest Plan Revision. Long-term sustained yield (LTSY) and the quantity of timber volume to be offered from suitable lands will be estimated using a timber harvest-scheduling model (Spectrum). In addition, timber harvest for purposes other than wood fiber production (i.e., from tentatively suitable or unregulated lands) will also be analyzed and volumes estimated. This analysis will be included in the DEIS.

<b>What are the implications of continuing under current management direction for Timber Production?</b>
--

Based on historic and current condition and trends, timber harvest levels will continue to be well below the ASQ and fall short of expectations. Direction to maximize growth and yield through short rotations, a high use of regeneration harvest, and intensive timber management is unattainable because of other resource management constraints and public values. The 1987 Forest Plans emphasize timber production, overlooking ecosystem management and principles of ecological sustainability. Suitable timberlands will continue to be adjusted to make corrections to the 1987 Forest Plans. Little will be known regarding the market for small-diameter logs, limiting the forests' ability to manage for improved forest health through commercial timber sales.